

APPENDIX A – Replacement Abstract

INSULIN PRODUCING CELLS DERIVED FROM HUMAN EMBRYONIC STEM CELLS

ABSTRACT

The present invention discloses insulin producing cells derived from human embryonic stem cells. Methods of generating, enriching, selecting, cloning and isolating populations of insulin-producing embryonic cell lines are disclosed. Insulin production in these cells can be glucose responsive or otherwise regulatable. Advantageously, these insulin producing cells can be stable cell lines derived from stable transfectants of hESC. Methods of using these cells, cell populations or cell lines particularly for cell replacement therapy are also disclosed.